REPORT OF COMPLIANCE SAMPLING INSPECTION (CSI)

AT
ConAgra Foods Packaged Foods LLC
2467 Henry Ladyn Drive
Fort Madison IA 52627

NPDES NO: IA- 0000833

September 20-23, 2021

BY
U. S. ENVIRONMENTAL PROTECTION AGENCY
Region 7
Enforcement and Compliance Assurance Division (ECAD)

INTRODUCTION

I performed a Compliance Sampling Inspection (CSI) at the ConAgra Foods Packaged Foods, LLC (ConAgra) facility in Fort Madison, Iowa, from September 20, 2021, through September 23, 2021. The inspection was authorized by Section 308(a) of the Federal Water Pollution Control Act, as amended. This narrative report presents the findings of the inspection.

PARTICIPANTS

ConAgra Foods
- Bryan Langerud, Plant Manager (Not present during inspection)
  - Email: bryan.langerud@conagra.com
- Clint Huebner, Sr. Facility Specialist
- Mike Waggoner, Sr. EHS Supervisor
  - Email: Michael.Waggoner@conagra.com
- Lucas Simpkins, Wastewater Supervisor
- Todd Boehne: Director, Environmental Management (present during closing conference, via phone)
- Rob Hicke: EHS Manager (present during closing conference via phone)
- Tony Frasie, Maintenance Manager (present during closing conference)

U. S. Environmental Protection Agency (EPA)
- Joe Heafner, Life Scientist (913) 551-7091 (Lead Inspector)
  - Email: heafner.joseph@epa.gov
- Hannah Lewis, Life Scientist (913) 551-7679
  - Email: lewis.hannah@epa.gov

PROCEDURES

On September 16, 2021, I contacted Mr. Huebner and stated that I would be conducting a CSI at the ConAgra facility the following week. Mr. Huebner explained the procedures for entering the facility and then stated that they would be expecting me on Monday, September 20, 2021. I arrived at ConAgra at 1:00 p.m. on September 20, 2021, and I introduced myself to Mr. Huebner. Mr. Huebner introduced Mr. Waggoner and Mr. Simpkins. I presented my credentials and explained the purpose and procedures of the inspection. These procedures included a facility walk-through with photos (attachment 1), a check of the self-monitoring records, the collection of influent and effluent samples, and an exit interview.

From September 20, 2021, through September 23, 2021, I used the facility's sampling equipment (HACH model 950) to collect a 24-hour composite sample of the process wastewater influent before the screening system. The samples were collected in a clean Nalgene bottle that was placed in a refrigerator near the sampling pump. Each day, facility personnel would collect the sample and transfer it into another clean Nalgene bottle that I supplied and place it into a separate refrigerator until I arrived at the facility. I removed the bottle from the refrigerator, agitated its contents and poured them into clean, pre-labeled containers for the analysis of Biochemical Oxygen Demand (BOD), Non-Filterable Solids (NFS), Ammonia, Total Kjeldahl Nitrogen (TKN), Nitrates+Nitrites, Total Nitrogen (by calculation) and Total Phosphorus (TP). I measured the pH and temperature in a separate grab sample using a field meter.

I used the facility's sampling equipment (SIGMA model 900) to collect a 24-hour composite sample of the process wastewater effluent before it was mixed with the domestic wastewater and non-contact cooling water. The samples were collected in a clean Nalgene bottle that was placed in a refrigerator near the sampling pump. Each day, facility personnel would collect the sample and transfer it into another clean Nalgene bottle that I supplied and place it into a separate refrigerator until I arrived at the facility. I removed the bottle from the refrigerator, agitated its contents and poured them into clean, pre-labeled containers for the analysis of BOD, NFS, Ammonia, TKN, Nitrates+Nitrites, Total Nitrogen (by calculation) and TP. I took a separate grab sample for the Oil and Grease analysis. I measured the pH and temperature in a separate grab sample using a field meter.

I took grab samples of the domestic wastewater influent utilizing the facility's grab pole. I poured them into clean, pre-labeled containers for the analysis of BOD and NFS. I measured the pH and temperature in a separate grab sample using a field meter.

I used the facility's sampling equipment (HACH model AS950) to collect a 24-hour composite sample of the domestic wastewater effluent before it was mixed with the domestic wastewater and non-contact cooling water. The samples were collected in a clean Nalgene bottle that was placed in a refrigerator near the sampling pump. Each day, I removed the bottle from the sampler refrigerator, agitated its contents and poured them into clean, pre-labeled containers for the analysis of BOD and NFS. I measured the pH and temperature in a separate grab sample using a field meter.

On Tuesday, September 21, 2021, and Wednesday, September 22, 2021, I placed the samples I collected on ice in an ice chest, sealed the container and shipped it overnight to the EPA Region 7 Science and Technology Center (STC) for analysis. On Thursday, September 23, 2021, I hand-delivered the packed samples to the STC. I followed Region 7 LSASD standard operating procedures in the collection, packaging, transportation, and handling of the samples. Field Sheets and Chain of Custody forms were electronically submitted each day following Region 7 procedures. Samples shipped on Tuesday, September 21, 2021, did not arrive to the STC on time, causing the BOD samples to exceed proper hold times. All other samples arrived at the STC within proper holding times.

FACILITY DESCRIPTION

ConAgra Foods is a canned meat and other products producer located on the south side of Fort Madison, Iowa along the Mississippi River. The legal description is the NE ¼, Section 28, Township 67 North, Range 05 West within Lee County (attachment 2). The physical and mailing address is 2467 Henry Ladyn Drive, Fort Madison, IA 52627. The facility has two different treatment systems. One treatment system treats domestic wastewater generated at the facility and the second treatment system treats process wastewater generated at the facility. Below is a description of each treatment system.

Domestic wastewater treatment facility (domestic WWTF)

Extended Aeration Activated Sludge Package Plant with a final clarifer, and chlorine contact chamber. The facility currently treats domestic wastewater generated by the 500 employees on site. Current expansion plans include adding approximately 100 more employees.

Biosolids are handled by the following:

Aerobic Sludge Digestion
Biosolids are trucked to the City of Fort Madison WWTF for final disposal.

Process wastewater treatment facility (**process WWTF**)

Screening building (screenings are disposed of via sanitary landfill)
Equalization tank
Dissolved Air Flotation (DAF)
(1)Aerobic Lagoon (2nd concrete aeration tank under construction)
(1)Final Clarifer (2nd clarifier under construction).

Process wastewater sludges are wasted from the clarifier into one of two holding lagoons. Solids are allowed to settle and process wastewater is sent back to the aerobic lagoon. Process wastewater sludges are then disposed of by land application under an Iowa Department of

Agriculture and Land Stewardship (IDALS) license (attachment 3).

According to the NPDES permit, the process wastewater system has a designed average wet weather flow of 0.945 million gallons per day (MGD) and a maximum wet weather flow of 1.153 MGD.

The WWTF's National Pollutant Discharge Elimination System (NPDES) Permit IA-0000833 was re-issued on September 1, 2021 (attachment 4**)**. The permit expires on August 30, 2026.

FINDINGS AND OBSERVATIONS

Self-Monitoring Data Review:

I obtained a spreadsheet of the NetDMR data for ConAgra Foods from January 2018, through the present, and reviewed the data. I did note that the NetDMR data covers an NPDES permit that was administratively extended from June 30, 2020, until the new permit was issued on September 1, 2021.

During the inspection, I also obtained electronic copies of the facility's Discharge Monitoring Reports (DMRs) for the years 2018 – 2021.

Table 1 represents the effluent violations noted during the review of the DMR. All violations were from Outfall 001 which includes a combination of process wastewater and domestic wastewater in addition to the non-contact cooling water for the facility. It should be noted that for the permit issued on September 1, 2021, effluent limits are now in effect for Outfalls 002 (process wastewater) and 003 (domestic wastewater) for all parameters with the exception of Fecal Coliform and E. coli. Fecal Coliform and E.coli effluent limits are still in effect for Outfall 001.

Table 1: Effluent violations noted during the inspection.

	BOD	Limit (lbs/day)	Total Risudual Chlorine (TRC)	Limit (mg/L	Fecal Coliform	Limit (#/100 mL)	Oil and Grease (O&G)	Limit (lbs/day)	Total Suspended Solids (TSS	Limit (lbs/day)
Feb-18					1600	400				
Jul-18							159.7627	104.78		
Aug-18							180.1848	`104.78		
Dec-18					1600	400				
Jan-19					1600	400				
Mar-19					490	400				
Jul-19					3500	400				
Jul-20									1936.367	362.7/725.4
Oct-20					540	400				
Nov-20									385.2529	362.7
Jan-21					490	400	139.2946	104.78	444.8385	362.7
Mar-21	613.09	298.22/596.49	1.8	1.2	1600	400			1594.034	362.7/725.4
Apr-21			1.73	1.2					1060.324	362.7/725.4
May-21									921.037	362.7/725.4
Jun-21					540	400				
Jul-21									595.2658	362.7

Limits are monthly average/daily maximums for BOD, TRC, O&G, and TSS)

Sample Results

The analytical results from the inspection were received on October 22, 2021, from the Region 7 STC laboratory. This data was not discussed during the exit interview. The analytical results for BOD, NFS, TKN, Ammonia, Nitrates+Nitrites, Total Nitrogen, Total Phosphorus, pH, and temperature of the samples I collected are presented in Tables 2 and 3 below. See attachment 5 for the analytical data packet.

After receiving the analytical results on October 22, 2021, I manually calculated the loading rates for BOD, NFS, and Oil and Grease. The calculated results are reflected in Table 3b.

Table 2a: Analytical Results for Domestic Wastewater Influent

Parameter	(Sept. 21) Sample # 301	(Sept. 22) Sample #302	(Sept. 23) Sample #303
BOD_5 (mg/L)[1]	169J[4]	194J[5]	474J[5]
NFS (mg/L)	57.2	297	318
Temperature (°C)[2]	23.5	27.3	23.1
pH[3]	8.21	7.87	8.16

[1]mg/L = milligrams per liter
[2] °C = degrees Celsius, Temperature was measured in the field.
[3] pH is not to be averaged; pH was measured in the field.
[4] Estimated value as samples did not arrive within holding times due to delivery delays.

Table 2b: Analytical Results for Process Wastewater Influent

Parameter	(Sept. 21) Sample # 201	(Sept. 22) Sample #202	(Sept. 23) Sample #203
BOD_5 (mg/L)[1]	919J[4]	1010	1410
NFS (mg/L)	624J[5]	411	703
TKN (mg/L)	42.0	50.8	63.1
Nitrate+Nitrate (mg/L)	5.02	5.0	7.26
Total Nitrogen	47.0	55.8	70.4
Ammonia (mg/L)	4.53	5.06	2.24
Total Phosphorus (mg/L)	9.45	11.4	14.0
Temperature (°C)[2]	31.3	31.1	22.2
pH[3]	5.05	5.97	4.76
Flow (MGD)	1.188	1.17	0.779

[1]mg/L = milligrams per liter
[2] °C = degrees Celsius, Temperature was measured in the field.
[3] pH is not to be averaged; pH was measured in the field.
[4] Estimated value as samples did not arrive within holding times

due to delivery delays

Table 3a: Analytical Results for Domestic Wastewater Effluent Samples Collected During Inspection

Parameter	(Sept. 21) Sample # 311	(Sept. 22) Sample #312	(Sept. 23) Sample # 13	Concentration Permit Limits[3]
BOD5 (mg/L)[1]	ND[4]	ND[5]	24.7	30/45
NFS (mg/L)	12.9	13.5J[6]	12.6	30/45
Temperature (°C)[2]	24.1	22.6	20.9	N/A
pH[2]	7.43	7.38	7.40	6.0 – 9.0
Flow in MGD	0.008	0.008	0.009	N/A

[1]mg/L = milligrams per liter.
[2] °C = degrees Celsius, pH is not to be averaged, pH was measured in the field.
[3]Permit limits for BOD and NFS are Monthly followed by Daily Maximum.
[4]Estimated value as samples did not arrive within holding times due to delivery delays.
[5]The analyte was not detected at or above the reporting limit.
[6]Results are an estimate due to poor precision in the laboratory duplicate sample.

Table 3b: Analytical Results for Process Wastewater Effluent Samples Collected During Inspection

Parameter	(Sept. 21) Sample # 211	(Sept. 22) Sample #212	(Sept. 23) Sample # 213	Concentration Permit Limits[3]
BOD5 (lbs/day)[1]	21.35	22.0	13.44	462/923
NFS (lbs/day)	118.49	83.05	26.96	561/1123
Ammonia (mg/L)	0.113	ND[4]	ND[4]	4.0/8.0
TKN (mg/L)	1.01J[5]	0.780	0.667	N/A
Nitrate+Nitrite (mg/L)	2.66	1.39	5.06	N/A
Total Nitrogen (mg/L)	3.67J[5]	2.17	5.73	134/194
Total Phosphorus (mg/L)	1.69	1.71	2.16	N/A
Oil and Grease (lbs/day)	53.376	55.00	33.61	162/324
Temperature (°C)[2]	30.3	29.7	28.4	N/A
pH[2]	7.34	7.37	7.39	6.0 – 9.0
Flow in MGD	1.28	1.319	0.806	N/A

[1]lbs/day = pounds per day. Results were calculated by taking the concentration (mg/L) multiplying by the flow rate, then multiplying by 8.34(weight of 1 gallon of water).
[2] °C = degrees Celsius, pH is not to be averaged, pH was measured in the field.
[3]Permit limits for BOD and NFS are Monthly followed by 7-day Averages. Limits for Ammonia and Total Nitrogen and Oil and Grease are 30-day average followed by Daily Maximum
[4]The analyte was not detected at or above the reporting limit.
[5]The quantitation is an estimate due to poor precision obtained in the laboratory matrix spike and matrix spike duplicate.

Results from sampling conducted during the inspection indicate that the facility was in compliance with the concentration limits (mg/L) and mass limits (kg/day) set forth in the permit.

Biosolids (sludge)

Domestic Biosolids

Biosolids generated from the domestic WWTF are wasted from the aeration tank into an aerated holding tank at the south end of the treatment facility. Biosolids are pumped out of the tank on an as needed basis and hauled to the City of Fort Madison WWTF for final disposal. During the inspection, Mr. Waggoner provided receipts for the pump outs in 2020 and 2021 (attachment 6).

Process Wastewater Sludge

Sludges generated by the process wastewater treatment process are removed from the final clarifier and stored in one of two storage basins located east of the aerated lagoon (photos 11-12). Mr. Huebner stated that the facility also utilized two dewatering bags for storage of process wastewater sludge (photo 13). According to Mr. Huebner and Mr. Waggoner, biosolids are allowed to settle in the lagoons and process wastewater from the lagoons is then returned to the aeration lagoon. Sludges are removed from the holding lagoons via a tank truck (photo 14) and land applied to nearby agricultural ground via an IDALS permit (attachment 3). Mr. Waggoner stated that land application is typically done in the fall once crops have been removed from the agricultural ground. Mr. Waggoner provided a spreadsheet indicating that approximately 4,587 wet tons of industrial sludges were land applied in 2020 (attachment 7). Based on information provided by Mr. Waggoner, I calculated the amount land applied to be approximately 500 dry tons based on an average of eleven percent solids.

Laboratory

The facility utilizes an in-house laboratory for the analysis of BOD and TSS. The facility also utilizes the Iowa Hygienics Laboratory and Keystone Laboratories for all other analytes. The ConAgra laboratory was recently inspected and certified by the IDNR (attachment 8). Mr. Simpkins provided copies of bench sheets and Standard Operating Procedures (SOPs) during the inspection. I reviewed the supplied documents and noted that all analysis complied with requirements of 40 CFR part 136. I noted that all holding times were met and all methods appeared to meet requirements of 40 CFR part 136. During the review of the laboratory, I noted that the pH buffer solution to use to calibrate the pH meter on a daily basis was expired at the time of the inspection. I informed Mr. Simpkins at the time of the inspection that the buffer solution needs to be replaced.

Stormwater

The ConAgra facility has a Standard Industrial Classification (SIC) Code of 2032- Canned Specialties. Under the Clean Water Act (CWA) and Code of Federal Regulations Chapter 40 Section 122 (40 CFR 122). This classification requires that the facility either seek permit coverage for stormwater discharges associated with industrial activities or seek a no-exposure certification from the permit authority. At the time of the inspection, Mr. Waggoner explained that all stormwater from the footprint of the facility is directed to a stormwater retention basin located east of the facility. He stated that the stormwater does not discharge from the basin, rather is allowed to absorb into the ground. Mr. Waggoner also stated that the ConAgra has developed a Stormwater Pollution Prevention Plan (SWPPP) for the facility and that regular inspections are performed. Mr. Waggoner provided a copy of the SWPPP and the monthly inspections for 2020 and 2021. I reviewed these documents and found that they were complete and accurate. Mr. Waggoner also provided a document containing several emails that indicated that since the facility does not discharge stormwater to surface water, a permit or no-exposure certification was not needed (attachment 9). I reviewed this document then contacted Ms. Cynthia Sans of EPA Region 7 for some clarification. ***ConAgra should work with the IDNR to revisit the determination that a permit or no-exposure certification is needed since this was last discussed in 2008.***

Operational Issues and Observations

1. I observed all areas of the domestic WWTF during the inspection (photos 1-6). I noted that all the units were operating at the time of the inspection. I also noted that the facility was taking grab samples of the influent as required by the permit. I also noted that the facility has recently installed and began to operate an automatic sampler for the effluent before combining with the non-contact cooling water and the process wastewater effluent.

2. I observed all areas of the process WWTF during the inspection (photos 7-12 & 15-17). I noted that all the units were operating at the time of the inspection. I also noted that a new aeration basin and new final clarifer were in the process of being constructed. Mr. Huebner stated that the facility was currently expanding the production at the facility, making it necessary for the expansion of the WWTF.

3. While observing both WWTFs, I noted that the facility is dosing each effluent with sodium hypochlorite. Mr. Huebner stated that this was being used to control algae in the clarifiers and used as a disinfectant to control Fecal Coliform and E. coli at the facility. I noted that in the previous permit issued to the facility, there was an effluent limit for Total Residual Chlorine (TRC), however the parameter was removed from the current permit. I reviewed the NPDES permit rationale and noted that, according to IDNR, “The WLA (Waste Load Allocation) dated October 12, 2020, calculated

monthly average and daily maximum WQBELs (Water Quality Based Effluent Limits) for TRC which are both equal to 6.50 mg/L. The attached statistical reasonable potential analysis of DMR data available for TRC from December 2015 through November 2020 shows that there is no reasonable potential for the facility's discharge from outfall 001 to cause or contribute to a WQS violation for TRC. Therefore, no WQBELs for TRC are included in the proposed permit." ***The facility should continue to monitor for TRC as long as it is being used as a disinfectant***.

4. I was unable to observe the outfall and the Mississippi River during the inspection. Mr. Waggoner explained that the process wastewater, domestic wastewater, and non-contact cooling water effluent flows are combined then piped to the main channel of the Mississippi River that is approximately 1 ½ miles from the facility. I did observe the combination of all three waste streams. I noted that the area had a noticeable chlorine smell at the time of the observations.

Summary

The facility has had sporadic effluent violations for BOD, TRC, Fecal Coliform, O&G and TSS from 2018 through 2021. It should be noted that limits for TRC were removed with the new NPDES permit that was issued on September 1, 2021.

The facility currently is in the middle of a construction project to add a new aeration basin, and final clarifier. This construction project has allowed the facility to expand its production at the facility. The construction project also included a new DAF that is currently in operation.

The facility should work with IDNR to make a current determination if a separate industrial stormwater permit is needed for the facility.

Although, the current NPDES permit does not contain a TRC limit, the facility should still continue to monitor for TRC as the facility continues to dose both domestic and process wastewater effluents with sodium hypochlorite to control bacteria and algae at the facility.

JOSEPH HEAFNER Digitally signed by JOSEPH HEAFNER Date: 2021.11.10 09:29:35 -06'00'

Joe Heafner
Life Scientist

NICOLE MORAN Digitally signed by NICOLE MORAN Date: 2021.11.10 10:06:15 -06'00'

Nicole Moran
Section Chief

Attachments:

1. Digital Photographs with Photo Log (13 pages)
2. Facility Satellite Photos/Maps (3 pages)
3. IDALS Permit (1 page)
4. NPDES permit issued on September 1, 2021 (17 pages)
5. Laboratory Analytical Report for Activity JAH2118 (11 pages)
6. Domestic Wastewater Biosolids pump out receipts (4 pages)
7. Process wastewater biosolids land application information (4 pages)
8. IDNR Lab Certification Report (17 pages)
9. Stormwater Emails (2 pages)

PHOTO LOG

Facility Name / Address: Conagra Foods Packaged Foods, LLC
2467 Henry Ladyn Drive
PO Box 1427
Fort Madison, IA 52627

State Facility ID#: N/A
Facility EPA ID#: IA-0000833
Date: September 20-23, 2021
Image Numbers: DSCN2935 – DSCN2956
File Name (if any): N/A
Photographer: Joe Heafner
Type of Camera: Nikon Coolpix AW100, Serial #: 32157507
Digital Recording Media: Flashcard
All digital photos were copied by: Joe Heafner
All digital photos were copied to: CD-R
Original copy is stored in: CD-R. Digital photos were downloaded to CD-R all by Joe Heafner. No changes were made in the original image files prior to storage on the CD-R.

Report Photo #	Photographer	Date	Approx. Time	Flashcard Name (DSCNxxxx.JPG)	Description
1.	Joe Heafner	9/20/21	1427	DSCN2935	This photograph shows the activated sludge package plant that treats domestic wastewater at the facility.
2.	Joe Heafner	9/20/21	1429	DSCN2936	This photograph shows the aeration chamber of the activated sludge treatment plant that treats domestic wastewater from the facility.
3.	Joe Heafner	9/20/21	1429	DSCN2937	This photograph the clarifier and chlorine dosing tube at the north end of the domestic wastewater treatment plant.
4.	Joe Heafner	9/20/21	1431	DSCN2938	This photograph shows the end of the chlorine contact chamber before the effluent is pumped and mixed with process wastewater from the facility and discharged.
5.	Joe Heafner	9/20/21	1432	DSCN2939	This photograph shows the sludge holding tank for the domestic wastewater. Sludge is removed periodically and transported to the city of Fort Madison for final disposal.
6	Joe Heafner	9/20/21	1449	DSCN2940	This photograph shows a 500-gallon sodium hypochlorate tote that is used to dose the domestic wastewater with chlorine.
7.	Joe Heafner	9/21/21	1006	DSCN2941	This photograph shows the screening room for the process wastewater from the facility. Screenings are placed in dumpster and disposed of at a nearby sanitary landfill.
8.	Joe Heafner	9/21/21	1012	DSCN2942	This photograph shows the Dissolved Air Floatation (DAF) that removed fats and oils from the process wastewater at the facility.
9.	Joe Heafner	9/21/21	1019	DSCN2943	This photograph shows the aeration lagoon that is used to treat process wastewater from the facility.
10.	Joe Heafner	9/21/21	1021	DSCN2944	This photograph shows construction of the new concrete basin to treat process wastewater from the facility.
11.	Joe Heafner	9/21/21	1024	DSCN2945	This photograph shows the south sludge holding basin. Sludge from the process wastewater is held in the lagoon then is pumped and land applied.
12.	Joe Heafner	9/21/21	1225	DSCN2946	This photograph shows the north sludge lagoon. Sludge from the process wastewater is held in the lagoon then is pumped and land applied.

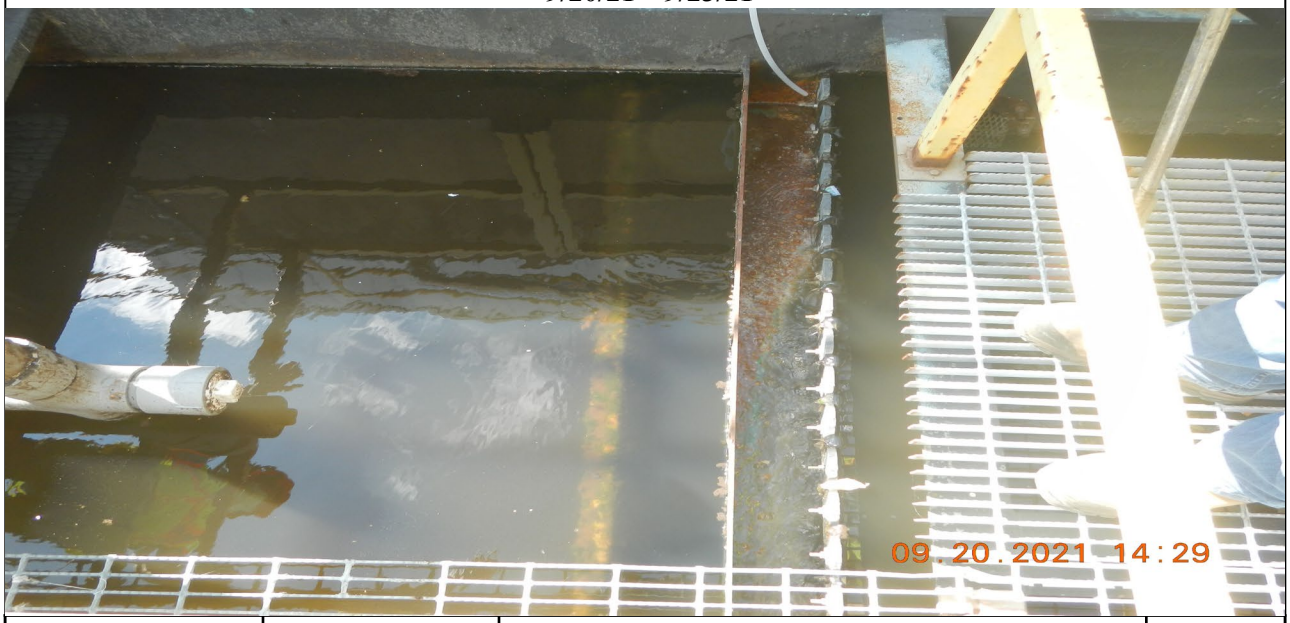
Report Photo #	Photographer	Date	Approx. Time	Flashcard Name (DSCNxxxx.JPG)	Description
13.	Joe Heafner	9/21/21	1027	DSCN2947	This photograph shows 1 of 2 sludge dewatering bags used to hold sludge as the sludge basins were full. Bags will be land applied. Water surrounding the bags is stormwater from recent rains.
14.	Joe Heafner	9/21/21	1030	DSCN2948	This photograph shows the tank used to land apply process wastewater sludge.
15.	Joe Heafner	9/21/21	1035	DSCN2949	This photograph shows the final clarifier for the process wastewater generated by the facility.
16.	Joe Heafner	9/21/21	1036	DSCN2950	This photograph shows the effluent quality produced by the final clarifer for the process wastewater generated by the facility.
17.	Joe Heafner	9/21/21	1042	DSCN2951	This photograph shows the combination box. Process wastewater and domestic wastewater is combined in this box then is pipped to the Mississippi River.
18.	Joe Heafner	9/22/21	1019	DSCN2952	This photograph shows the Sigma 900 automatic sampler that is used to collect effluent samples from the process wastewater. EPA sampling conducted during the inspection utilized this device.
19.	Joe Heafner	9/22/21	1023	DSCN2953	This photograph shows a HACH AS950 automatic sampling machine to collect influent samples of process wastewater. EPA sampling conducted during the inspection utilized this machine.
20.	Joe Heafner	9/22/21	1023	DSCN2954	This photograph shows the process wastewater influent sampling bottle inside of a refrigerator.
21.	Joe Heafner	9/22/21	1049	DSCN2955	This photograph shows a HACH AS950 sampling machine used to collect effluent samples from the domestic wastewater treatment system. EPA sampling conducted during the inspection utilized this sampling device.
22.	Joe Heafner	9/22/21	1049	DSCN2956	This photograph shows the sampling bottle for the domestic wastewater sampler.

ConAgra Foods
Fort Madison, IA 52627
9/20/21 – 9/23/21

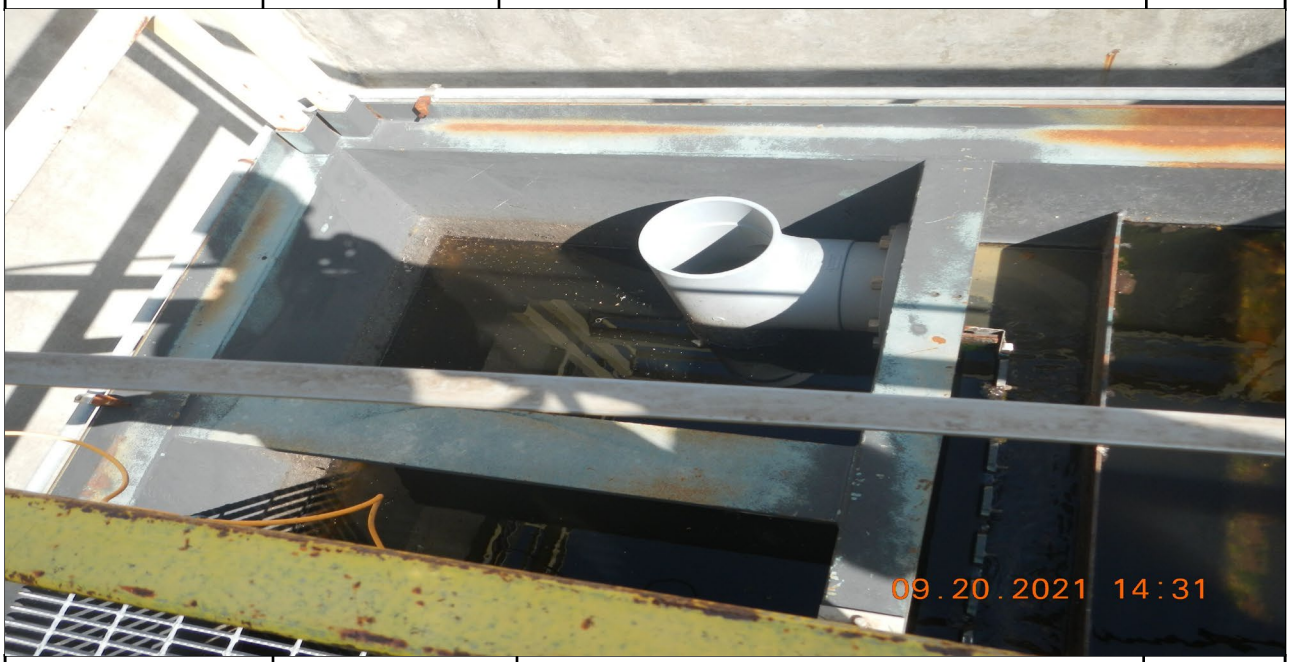
Compliance Sampling Inspection	DESCRIPTION	This photograph shows the activated sludge package plant that treats domestic wastewater at the facility.	1
			Date
Direction: Down	PHOTOGRAPHER	Joe Heafner	9/20/21

Compliance Sampling Inspection	DESCRIPTION	This photograph shows the aeration chamber of the activated sludge treatment plant that treats domestic wastewater from the facility.	2
			Date
Direction: North	PHOTOGRAPHER	Joe Heafner	9/20/21

ConAgra Foods
Fort Madison, IA 52627
9/20/21 – 9/23/21



Compliance Sampling Inspection	DESCRIPTION	This photograph the clarifier and chlorine dosing tube at the north end of the domestic wastewater treatment plant.	3
			Date
Direction: West	PHOTOGRAPHER	Joe Heafner	9/20/21



Compliance Sampling Inspection	DESCRIPTION	This photograph shows the end of the chlorine contact chamber before the effluent is pumped and mixed with process wastewater from the facility and discharged.	4
			Date
Direction: Down	PHOTOGRAPHER	Joe Heafner	9/20/21

ConAgra Foods
Fort Madison, IA 52627
9/20/21 – 9/23/21

Compliance Sampling Inspection	DESCRIPTION	This photograph shows the sludge holding tank for the domestic wastewater. Sludge is removed periodically and transported to the city of Fort Madison for final disposal.	5
			Date
Direction: West	PHOTOGRAPHER	Joe Heafner	9/20/21

Compliance Sampling Inspection	DESCRIPTION	This photograph shows a 500-gallon sodium hypochlorate tote that is used to dose the domestic wastewater with chlorine.	6
			Date
Direction: East	PHOTOGRAPHER	Joe Heafner	9/20/21

ConAgra Foods
Fort Madison, IA 52627
9/20/21 – 9/23/21

Compliance Sampling Inspection	DESCRIPTION	This photograph shows the screening room for the process wastewater from the facility. Screenings are placed in dumpster and disposed of at a nearby sanitary landfill.	7
			Date
Direction: North	PHOTOGRAPHER	Joe Heafner	9/21/21

Compliance Sampling Inspection	DESCRIPTION	This photograph shows the Dissolved Air Floatation (DAF) that removed fats and oils from the process wastewater at the facility.	8
			Date
Direction: West	PHOTOGRAPHER	Joe Heafner	9/21/21

ConAgra Foods
Fort Madison, IA 52627
9/20/21 – 9/23/21

Compliance Sampling Inspection	DESCRIPTION	This photograph shows the aeration lagoon that is used to treat process wastewater from the facility.	9
			Date
Direction: Northeast	PHOTOGRAPHER	Joe Heafner	9/21/21

Compliance Sampling Inspection	DESCRIPTION	This photograph shows construction of the new concrete basin to treat process wastewater from the facility.	10
			Date
Direction: West	PHOTOGRAPHER	Joe Heafner	9/21/21

ConAgra Foods
Fort Madison, IA 52627
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Compliance Sampling Inspection	DESCRIPTION	This photograph shows the south sludge holding basin. Sludge from the process wastewater is held in the lagoon then is pumped and land applied.	11
			Date
Direction: East	PHOTOGRAPHER	Joe Heafner	9/21/21

Compliance Sampling Inspection	DESCRIPTION	This photograph shows the north sludge lagoon. Sludge from the process wastewater is held in the lagoon then is pumped and land applied.	12
			Date
Direction: Northwest	PHOTOGRAPHER	Joe Heafner	9/21/21

ConAgra Foods
Fort Madison, IA 52627
9/20/21 – 9/23/21

Compliance Sampling Inspection	DESCRIPTION	This photograph shows 1 of 2 sludge dewatering bags used to hold sludge as the sludge basins were full. Bags will be land applied. Water surrounding the bags is stormwater from recent rains.	13
			Date
Direction: East	PHOTOGRAPHER	Joe Heafner	9/21/21

Compliance Sampling Inspection	DESCRIPTION	This photograph shows the tank used to land apply process wastewater sludge.	14
			Date
Direction: North	PHOTOGRAPHER	Joe Heafner	9/21/21

ConAgra Foods
Fort Madison, IA 52627
9/20/21 – 9/23/21

Compliance Sampling Inspection	DESCRIPTION	This photograph shows the final clarifier for the process wastewater generated by the facility.	15
			Date
Direction: South	PHOTOGRAPHER	Joe Heafner	9/21/21

Compliance Sampling Inspection	DESCRIPTION	This photograph shows the effluent quality produced by the final clarifer for the process wastewater generated by the facility.	16
			Date
Direction: Down	PHOTOGRAPHER	Joe Heafner	9/21/21

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9/20/21 – 9/23/21

Compliance Sampling Inspection	DESCRIPTION	This photograph shows the combination box. Process wastewater and domestic wastewater is combined in this box then is pipped to the Mississippi River.	17
			Date
Direction: Down	PHOTOGRAPHER	Joe Heafner	9/21/21

Compliance Sampling Inspection	DESCRIPTION	This photograph shows the Sigma 900 automatic sampler that is used to collect effluent samples from the process wastewater. EPA sampling conducted during the inspection utilized this device.	18
			Date
Direction: N/A	PHOTOGRAPHER	Joe Heafner	9/22/21

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9/20/21 – 9/23/21

Compliance Sampling Inspection	DESCRIPTION	This photograph shows a HACH AS950 automatic sampling machine to collect influent samples of process wastewater. EPA sampling conducted during the inspection utilized this machine.	19
			Date
Direction: N/A	PHOTOGRAPHER	Joe Heafner	9/22/21

Compliance Sampling Inspection	DESCRIPTION	This photograph shows the process wastewater influent sampling bottle inside of a refrigerator.	20
			Date
Direction: N/A	PHOTOGRAPHER	Joe Heafner	9/22/21

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Fort Madison, IA 52627
9/20/21 – 9/23/21

Compliance Sampling Inspection	DESCRIPTION	This photograph shows a HACH AS950 sampling machine used to collect effluent samples from the domestic wastewater treatment system. EPA sampling conducted during the inspection utilized this sampling device.	21
			Date
Direction: N/A	PHOTOGRAPHER	Joe Heafner	9/22/21

Compliance Sampling Inspection	DESCRIPTION	This photograph shows the sampling bottle for the domestic wastewater sampler.	22
			Date
Direction: N/A	PHOTOGRAPHER	Joe Heafner	9/22/21